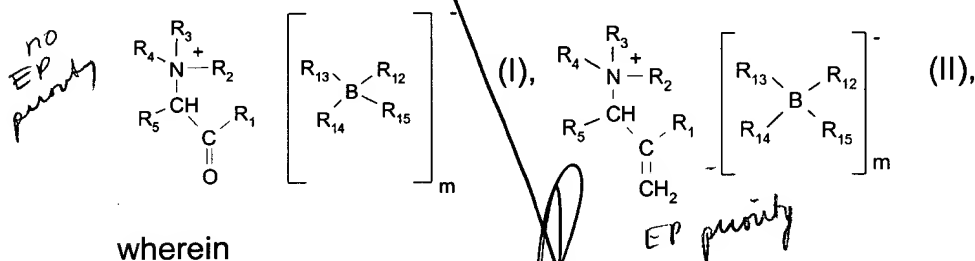


We claim:

5 *Sub B1*
A photoactivatable coating composition comprising
(A) an activated unsaturated group-containing compound, (B) an
activated CH group-containing compound, (C) a catalyst in the form of
one or more Lewis or Brönstedt bases, with the conjugated acids of the
latter having a pKa of at least 10, and (D) a photoinitiator, wherein the
photoinitiator is a photolabile base.

10 2. A coating composition according to claim 1, wherein the photolabile base
is selected from

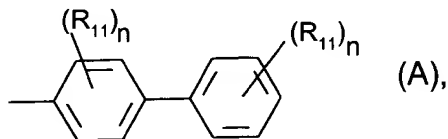
1) α -ammonium, α -iminium or α -amidinium salts of formula (I) or (II)



wherein

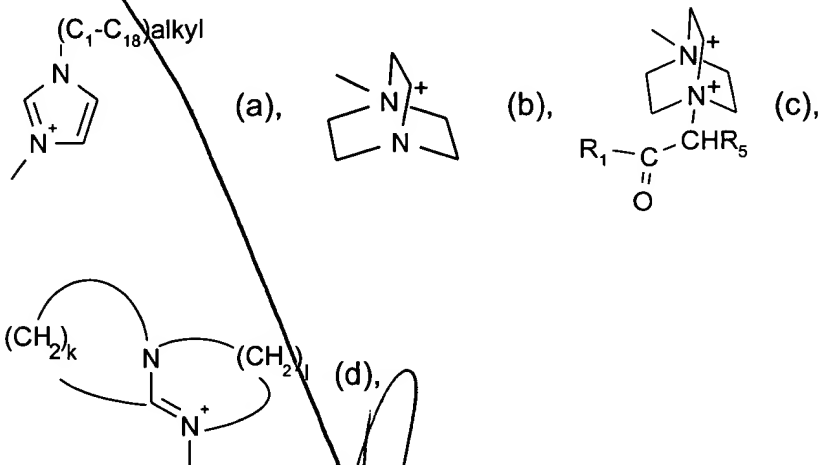
15 m is 1 or 2 and corresponds to the number of positive charges of the
cation;

R₁ is phenyl, naphthyl, phenanthryl, anthracyl, pyrenyl, thienyl,
thianthrenyl, thioxanthyl, fluorenyl or phenoxazinyl, these radicals being
unsubstituted or mono- or polysubstituted with C₁-C₁₈ alkyl, C₃-C₁₈-
alkenyl, NR₆R₇, OH, CN, OR₈, SR₈, C(O)R₉, C(O)OR₁₀ or halogen, or R₁
20 is a radical of formula A



R₂, R₃, and R₄ each independently are hydrogen, C₁-C₁₈ alkyl, C₃-C₁₈
alkenyl or phenyl, or R₂ and R₃ and/or R₄ and R₃ each independently

form a C₂-C₁₂ alkylene bridge; or R₂, R₃, R₄, together with the linking nitrogen atom, are a group of the structural formula (a), (b), (c), or (d)



k and l each independently are a number from 2 to 4;

R₅, R₆, R₇, R₈, R₉, and R₁₀ are hydrogen or C₁-C₁₈ alkyl;

R₁₁ is C₁-C₁₈ alkyl, C₂-C₁₈ alkenyl, NR₆R₇, OR₈, or SR₈; and

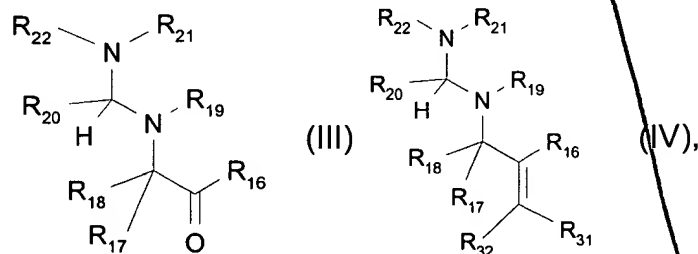
n is 0 or 1, 2 or 3;

R₁₂, R₁₃, and R₁₄ are phenyl or another aromatic hydrocarbon, these radicals being unsubstituted or mono- or polysubstituted with C₁-C₁₈ alkyl, OR₈, or halogen;

R₁₅ is C₁-C₁₈ alkyl, phenyl or another aromatic hydrocarbon, the radicals phenyl and aromatic hydrocarbon being unsubstituted or mono- or polysubstituted with C₁-C₁₈ alkyl, OR₈, or halogen;

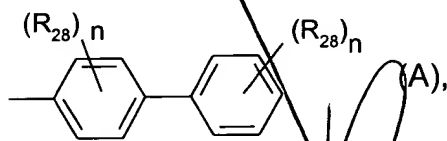
or

2) compounds of formula (III) or (IV)



wherein

R_{16} is phenyl, naphthyl, phenanthryl, anthracyl, pyrenyl, thienyl, thianthrenyl, thioxanthyl, fluorenyl or phenoxazinyl, these radicals being unsubstituted or mono- or polysubstituted with C_1 - C_{18} alkyl, C_3 - C_{18} -alkenyl, $NR_{23}R_{24}$, OH, CN, OR_{25} , SR_{25} , $C(O)R_{26}$, $C(O)OR_{27}$ or halogen, or R_{16} is a radical of formula A



R_{17} and R_{18} each independently are hydrogen, C_1 - C_{18} alkyl, C_3 - C_{18} alkenyl, C_3 - C_{18} alkynyl or phenyl;

R_{20} is C_1 - C_{18} alkyl or $NR_{29}R_{30}$;

R_{19} , R_{21} , R_{22} , R_{23} , R_{24} , R_{25} , R_{26} , and R_{27} are hydrogen or C_1 - C_{18} alkyl;

R_{28} is C_1 - C_{18} alkyl, C_2 - C_{18} alkenyl, $NR_{23}R_{24}$, OR_{25} , or SR_{25} ; and R_{29} and R_{30} each independently are hydrogen or C_1 - C_{18} alkyl; or

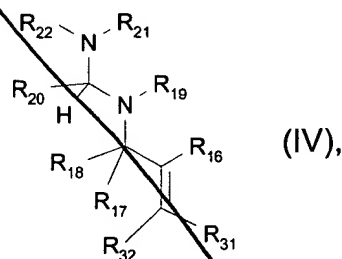
R_{19} and R_{21} together form a C_2 - C_{12} alkylene bridge or

R_{20} and R_{22} together, independently of R_{19} and R_{21} , form a C_2 - C_{12} alkylene bridge or, if R_{20} is $NR_{29}R_{30}$, R_{30} and R_{22} together form a C_2 - C_{12} alkylene bridge.

R_{31} is hydrogen or C_1 - C_{18} alkyl;

R_{32} is hydrogen, C_1 - C_{18} alkyl or phenyl

3. A coating composition according to claim 2, wherein the photolabile base is an α -aminoalkene of the structure (IV),



Sub 62

EP priority

Sub B2
cont.

wherein

R₁₆ is phenyl;

R₁₇ and R₁₈ are hydrogen or methyl;

R₁₉ and R₂₁ together form a C₃-alkylene bridge;

5 R₂₀ and R₂₂ together form a C₃-alkylene bridge;

R₃₁ and R₃₂ are hydrogen.

4. A coating composition according to claim 1, wherein component (D) is present in an amount of from 0.01 to 10 wt.% based on components (A) + (B).
10
5. A coating composition according to claim 1, wherein component (C) is present in an amount of from 0.01 to 10 wt.% based on components (A) + (B).
15
6. A coating composition according to claim 1, wherein the composition additionally comprises a sensitizer selected from the group of thioxanthenes, oxazines, ketocoumarins, rhodamines, benzophenone, and derivatives thereof.
20
7. A coating composition according to claim 6, wherein the sensitizer is selected from the group of benzophenone and derivatives thereof.
8. A coating composition according to claim 1, wherein (C) is 1,8-diazabicyclo-[5,4,0]-undec-7-ene.
25
9. A coating composition according to claim 1, wherein the compound with an activated CH group is an oligomeric or polymeric malonate compound and/or an acetoacetate group-containing compound.
30

10. A coating composition according to claim 9, wherein the malonate compound is a polyurethane, a polyester, a polyacrylate, an epoxy resin, a polyamide or a polyvinyl resin with malonate groups in the main and/or side chain.

5

11. A coating composition according to claim 1, wherein (A) and (B) are present in an amount such that the ratio of the number of activated CH groups to the number of activated unsaturated groups is in the range of about 0.25 to about 4.0.

10

12. A coating composition according to claim 11, wherein (A) and (B) are present in an amount such that the ratio of the number of activated CH groups to the number of activated unsaturated groups is in the range of about 0.5 to about 2.0.

15

13. A coating composition according to claim 1, wherein (C) and (D) are present in an amount such that the weight ratio of (C) to (D) is in the range of about 0.1 to about 2.5.

20

14. A coating composition according to claim 1 wherein the coating is applied to a substrate and subsequently the substrate is exposed to UV light.

15. Use of a coating composition according to claim 1 in car repair.